

Version With Markings to Show Changes Made

IN THE CLAIMS:

12. (Amended) The power generator according to ~~any one of claims 1 to 11,~~ wherein at least one of the stator and the magnetic core is made of a single layer or a lamination of the soft magnetic material of the plate thickness d.

14. (Amended) An electronic device, comprising:

~~thea~~ power generator according to ~~any one of claims 1 to 13;~~
and comprising:

a rotor having a permanent magnet;

a stator and a magnetic core of soft magnetic material constituting
a magnetic circuit; and

a coil wound around the magnetic core,

wherein the plate thickness d (m) of the soft magnetic material
constituting at least one of the stator and the magnetic core is set at a value
represented by the following formula of

$$d = \sqrt{\frac{k_h}{k_e}} \rho \cdot f^{-0.375} B_m^{-0.175} \quad (1)$$

where k_h represents hysteresis loss coefficient, k_e represents eddy-current loss coefficient, $\rho(\Omega \cdot m)$ represents resistivity, f (Hz) represents frequency and B_m (T) represents maximum amplitude magnetic flux density of the soft magnetic material; and

a processor actuated by the electric energy generated by the power generator.

15. (Amended) An electronically controlled timepiece, comprising:

~~thea~~ power generator according to ~~any one of claims 1 to 14;~~
and comprising:

a rotor having a permanent magnet;

a stator and a magnetic core of soft magnetic material constituting a magnetic circuit; and

a coil wound around the magnetic core,

wherein the plate thickness d (m) of the soft magnetic material constituting at least one of the stator and the magnetic core is set at a value represented by the following formula of

$$d = \sqrt{\frac{k_h}{k_e}} \rho \cdot f^{-0.375} B_m^{-0.175} \quad (1)$$

where k_h represents hysteresis loss coefficient, k_e represents eddy-current loss coefficient, $\rho(\Omega \cdot m)$ represents resistivity, f (Hz) represents frequency and B_m (T) represents maximum amplitude magnetic flux density of the soft magnetic material; and

a processor for driving a time display by the electric energy generated by the power generator.

23. (Amended) The method of setting plate thickness in a magnetic circuit in a power generator according to claim 21 ~~or~~ 22,

wherein the soft magnetic material constituting at least one of the stator and the magnetic core has a lamination structure and the respective layers forming the lamination structure have a minimum thickness of not less than 0.05mm.